

### **REMARKS**

In this preliminary amendment, Applicants have amended the claims and provided a supplemental information disclosure statement. Further, a telephonic interview was conducted between the Examiner and the undersigned on October 16, 2006. In the telephonic interview, the Examiner and undersigned discussed the amendments to the claims, which are provided in the present response. Applicants appreciate the consultation with the Examiner. Accordingly, Applicants respectfully request reconsideration and allowance of all pending claims.

#### **Amendment to Claims 1, 15 and 17**

To begin, the present application relates generally to intelligent remote intervention devices, where a device performs a logical preprogrammed set of tasks via the application of an energy source, which may specifically include valves used for downhole operations. *See* Application, page 1, para. 0002, page 8, para. 0021. Typically, downhole tasks utilize specialized equipment and require skilled operators to perform the downhole operations. *See id.* at page 1, para. 0003 to page 3, para. 0008. To overcome the limitations of typical downhole operations, the present techniques describe a system, method and apparatus that independently perform operations in a preprogrammed logical sequence, use pressure as the primary basis for control and actuation, and eliminate the need for operator interaction. For instance, the application describes a system, method and apparatus that include two or more valves utilized to actuate a sequenced set of events by one or more downhole tools with the application of pressure to the valves. *See id., e.g.,* at FIGs. 1-5; page 4, para. 0011 to page 7, para. 0013; page 10, para. 0026 to p. 25, para. 0059. Examples of the operation of some of the embodiments are described at least in the passages on p. 18, para. 0043 to p. 22, para. 0050, which reference FIGs. 3 and 4.

To clarify the claimed subject matter, Applicants have amended claims 1, 15 and 17. In particular, claim 1 has been amended to recite "... are arranged to independently actuate performance of a sequenced set of events by one or more downhole tools based on the application of pressure to said valves." Claim 15 has

been amended to recite "... is arranged to actuate performance of said step based on the application of pressure to said valves." Finally, claim 17 has been amended to delete the phrase "with the application of pressure over a designated pressure interval" and to recite " ... and wherein the combination of two or more valves independently actuate performance of the sequenced set of events by one or more downhole tools based on an application of pressure to the combination of two or more valves." These amendments are not believed add any new matter and are fully supported in the present application. *See id.*, e.g., at FIGs. 1-5; page 4, para. 0011 to page 7, para. 0013; page 10, para. 0026 to p. 25, para. 0059. Accordingly, Applicants respectfully request entry of these amendments.

#### **Previous Rejections under 35 U.S.C. §§ 102 and 103**

In the Final Office Action mailed February 13, 2006, the Examiner rejected claims 1-26 under 35 U.S.C. §§ 102 and 103. In particular, the Examiner rejected claims 1, 4-10, 13, 14, 17, 19-23 and 26 under U.S.C. § 102 (b) as being anticipated by U.S. Patent Application No. 6,388,577 to Carstenen, which is herein referred to as "Carstenen." Further, the Examiner rejected claims 2, 3, 12, 18 and 25 under 35 U.S.C. § 103 (a) as being unpatentable over Carstenen in view of U.S. Patent No. 6,450,263 to Schewendemann, which is herein referred to as "Schewendemann." The Examiner also rejected claims 2, 3, 11, 12, 18, 24 and 25 under 35 U.S.C. § 103 (a) as being unpatentable over Carstenen and U.S. Patent No. 4,865,127 to Koster, which is herein referred to as "Koster." Finally, the Examiner rejected claims 15 and 16 under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 5,704,426 to Rytlewski, which is herein referred to as "Rytlewski," in view of Carstenen. Applicants respectfully submit that these references, alone or in combination, do not disclose the claimed subject matter.

To begin, Carstenen describes a system and method for communicating with remotely controllable down hole tools in a well bore. *See* Carstenen, Abstract; col. 2, line 66 - col. 3, line 30. In Carstenen, air guns 16 and 24 are coupled to a well head

and are configured to be controlled by an operator through a portable computer 34. *See id.* at col. 5, lines 43-65; col. 6, lines 31-49. The "pressure impulses" provided by the air guns 16 and 24 are controlled by the operators to access one of the down hole tools. *See id.* at col. 6, lines 50-56. To control the different tools, encoded signal patterns are utilized to access a specific down hole tool. *See id.* at col. 8, line 48 to col. 9, line 27. The pressure impulses are not applied to the valves, but are decoded by signal detection and control circuitry 75 in the downhole tool, which includes a hydrophone 77. *See id.* at Fig. 3; col. 7, line 53 to col. 8, line 10. Once the specific pressure impulse is decoded, power signals are provided to an actuator 89 from a power pack 73 to activate the tool. *See id.* As such, Carstenen describes a method for an operator to communicate and control individual down hole tools through specific encoding of pressure impulses that are detected by the downhole tool, not actuating performance of a sequenced set of events based on the application of pressure to the valves.

Further, the Examiner appears to rely on Carstenen in combination with one of Schewendemann, Koster, and Rytlewski to reject other claims. However, the other references are not believed to disclose all of the recited features of the claims. In particular, these references are not believed to provide or suggest actuating performance of a sequenced set of events based on the application of pressure to the valves. Accordingly, Applicants respectfully submit that the Carstenen, Schewendemann, Koster, and Rytlewski references, alone or in combination, do not disclose the claimed subject matter.




**CONCLUSION**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

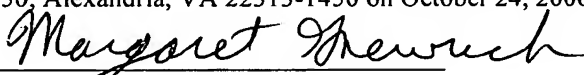
Respectfully submitted,

Date: October 24, 2006

  
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on October 24, 2006.

  
Margaret Gnewuch